## **Preface**

When patients arrive in our clinics, taking a good case history is an essential component of a comprehensive audiologic evaluation. Patients are asked how their hearing loss has affected their ability to understand speech in a variety of listening situations. They should be asked about the presence of dizziness, lightheadedness, tinnitus or otalgia. Patients should be asked about any prescriptive drugs they have used, as well as information on drugs they are currently taking. In addition, patients should be asked about their exposure to noise (recreational and occupational), as well as a variety of other questions in order to gauge how the hearing loss has affected their quality of life. However, one question typically not asked of patients is whether or not their hearing loss has resulted in diminished abilities to localize. When was the last time a patient (other than patients with unilateral or significant asymmetric hearing loss), without prompting by the audiologist, volunteered information about reduced skills to localize? My guess is that few patients report increased difficulty determining if sounds are arriving from the left or right, up or down or in front or behind. This is not to suggest that the problem does not exist. It is merely a suggestion that reduced localization does not appear to be a major complaint or concern of most of my patients with hearing loss. The authors of this issue of Trends suggest that diminished ability to localize is often present with hearing loss and that clinicians are typically not aware that the problem exists.

This issue of *Trends* presents a comprehensive discussion of localization. First, the authors explain why localization is important and why its decline as a result of hearing loss should be of concern to the professional. Next, the authors provide information on the cues necessary for localization to occur and then differentiate how these cues are different for horizontal (left/right) versus vertical (up/down) localization. This is followed by an important discussion on how different types of hearing aids (body, BTE, ITE, ITC and CIC), hearing loss (type, magnitude and configuration), method of fitting (monaural versus binaural, directional microphones and compression) and earmold style (closed, open and sleeve) affect localization differently. This issue concludes with an excellent section providing a series of recommendations for clinicians to follow so their patients can enjoy a hearing aid fitting providing the highest probability of improving localization or at least preventing localization from being diminished further though the use of amplification.

Denis Byrne and William Noble are prolific writers in the area of hearing loss and amplification. Denis is currently the Research Director and Senior Principal Research Scientist at the National Acoustics Laboratories in Australia. He received his B.A. (Hons.) in Psychology from the University of Sydney (1957) and his Ph.D. in Audiology from Macquarie University (1985). Among his numerous contributions, along with Harvey Dillon, was the introduction of the NAL-R prescriptive formula that is now the most commonly used method for selecting the appropriate gain for linear hearing aids. Denis has published nearly 100 papers between 1972–1997 and has contributed more than ten chapters to a variety of textbooks from 1980 to the present. In addition, he has been an invited speaker at a large number of international meetings.

Bill Noble is currently Associate Professor of Psychology at the University of New England. He received his B.A. (Hons.), M.A. and Ph.D. at the University of Manchester. His major research has been

on self-assessment scales to measure the disability and handicap related to hearing loss. This interest led to the publication of the popular *Hearing Measurement Scale*. In addition, his other interests are auditory spatial localization and occupational hearing loss. He has authored two books, thirteen book chapters and nearly one hundred papers. In addition, he has been an invited speaker at numerous international meetings on a wide variety of topics.

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